In re Appln. of Hideaki KAMIJO
Application No. Unassigned

CLAIM AMENDMENTS

1. (Currently Amended) An inspection apparatus for inspecting a target object based on ~~the basis of a~~ content of a fluorescent component included in the target object, the inspection apparatus comprising:

conveying means for conveying the target object along a conveyance path;

a light-emitting device for emitting light toward the target object conveyed by the conveying means;

a ~~light-receiving~~ light-detecting device for ~~receiving~~ detecting fluorescence emitted from the target object ~~as~~ when irradiated with the light; and

a fluorescent member disposed on the conveyance path ~~and adapted to generate~~ for generating fluorescence ~~against~~ in response to light emitted from the light-emitting device.

2. (Currently Amended) The inspection apparatus according to claim 1, further comprising controlling means for, before the target object conveyed by the conveying means arrives at an inspection area of the conveyance path, receiving an output signal from the ~~light-receiving~~ light-detecting device to detect ~~a~~ quantity of the fluorescence generated from the fluorescent member, and for controlling ~~a~~ quantity of the light from the light-emitting device based on ~~the basis of the~~ quantity of the fluorescence generated ~~from~~ by the fluorescent member.

3. (Original) The inspection apparatus according to claim 1, wherein the fluorescent member is a fluorescence glass.

4. (Original) The inspection apparatus according to claim 2, wherein the fluorescent member is a fluorescence glass.

5. (Currently Amended) The inspection apparatus according to claim 1, further comprising:

a light-detecting portion for outputting a signal depending on ~~a~~ quantity of the fluorescence ~~amount received~~ detected by the ~~light-receiving~~ light-detecting device;

light source control means ~~to control a~~ for controlling quantity of light ~~emitting amount~~ emitted from the light-emitting device for changing, in an analog manner, to a pre-determined quantity selected by the control means for controlling the quantity of the light emitted;

arithmetic means for calculating ~~the~~ changing fluorescence quantity; and

decision means for deciding ~~a~~ type of the target object based on ~~the basis of~~ the changing ~~quantity of~~ fluorescence quantity.

6. (Currently Amended) The inspection apparatus according to claim 5, wherein the arithmetic means ~~calculating~~ calculates the changing ~~quantity of~~ fluorescence quantity from ~~the~~ changing ~~amount~~ quantity of ~~the~~ illumination ~~from~~ by the light-emitting device by second order differentiating output data from the ~~right-receiving~~ light-detecting portion.

7. (Currently Amended) The inspection apparatus according to claim 5, wherein the decision means ~~deciding a~~ decides type of the target object based on ~~the basis of~~ a comparison between a pre-determined quantity and the changing ~~quantity of the fluorescent~~ fluorescence quantity.

8. (Currently Amended) An inspection method for inspecting a target object based on ~~the basis of a~~ content of a fluorescent component included in the target object, the inspection method comprising ~~steps of~~:

detecting a start signal;

calibrating ~~a~~ quantity of light ~~amount~~ emitted from a light-emitting device;

deciding ~~a~~ type of the target object based on ~~the basis of a fluorescent quantity~~ fluorescence emitted from the target object illuminated by the light emitted by the light-emitting device; and

continuing ~~the step of~~ deciding ~~a~~ the type of the target object until a stop signal is detected.

9. (Currently Amended) The inspection method according to claim 8, ~~the step of~~ wherein calibrating the quantity of light ~~amount~~ emitted from the light-emitting device ~~having steps of~~ includes:

outputting an initial control signal to the ~~right-emitting~~ light-emitting device;

detecting a ~~fluorescent quantity from~~ fluorescence with a ~~right-receiving~~ light-detecting device while ~~a~~ an illuminating member is illuminated by the light-emitted by light-emitting device;

deciding an illumination quantity for the ~~right-emitting~~ light-emitting device by comparing ~~between~~ a pre-determined ~~fluorescent quantity~~ fluorescence and the ~~detected fluorescent quantity to the~~ fluorescence detected until difference between ~~these values~~

~~becoming equals to~~ the pre-determined fluorescence and the fluorescence detected becomes zero; and

outputting the illumination quantity as a corrected control signal.

10. (Currently Amended) The inspection method according to claim 8, ~~the step of~~ wherein deciding ~~a~~ the type of the target object ~~having steps of~~ includes:

changing the control signal, based on the corrected signal, in a analog ~~rule~~ manner;

calculating a second order differential of changing output from the ~~right-receiving~~ light-detecting device; and

determining ~~a~~ the type of the target object by comparing the second order ~~value~~ differential and a pre-determined threshold value.